

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): An articulated robot comprising:

a plurality of tools at a single unit thereof sharing portions of axes and capable of attaching the tools respectively tips of a plurality of axes connected to the axes independently therefrom, and

a control apparatus for subjecting a designated one of the tools to an interpolate control while controlling a position thereof ~~or controlling a position and an attitude thereof and~~ subjecting the tool which is not designated to a uniform pay off control to instruct to an axis angle of a target position.
2. (currently amended): The control apparatus of an articulated robot according to Claim 1, comprising:

 an information acquiring member for acquiring information in correspondence with an angle of each axis as the target position;

 a tool selecting member for selecting one of the plurality of tools as an object of the interpolate control while controlling the position or controlling the position and the attitude;

 a passing point determining member for determining a passing point at which the selected tool is to be moved successively by the interpolate control;

 an axis position determining member for determining each axis position for moving a control point of the selected tool to the determined passing point by an inverse conversion operation; and

an uniform pay off controlling member for subjecting the axis which is unrelated to moving the control point of the selected tool to the uniform pay off control to instruct to the axis angle of the target position.

3. (currently amended): The control apparatus of an articulated robot according to Claim 2, further comprising:

a preventing member for preventing an operation instruction from being generated with regard to the axis which is unrelated to moving the control point of the selected tool.

4. (new): An articulated robot comprising:

a plurality of tools at a single unit thereof sharing portions of axes and capable of attaching the tools respectively tips of a plurality of axes connected to the axes independently therefrom, and

a control apparatus for subjecting a designated one of the tools to an interpolate control while a position and an attitude thereof and subjecting the tool which is not designated to a uniform pay off control to instruct to an axis angle of a target position.